

## AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the above-identified application.

### Listing of Claims:

1. (Currently amended) A method for assessing ~~predisposition of a human subject for predisposition to a mental disorder phenotype having an association with an at-risk allele of a gene that encodes monoamine oxidase A enzyme, the association being conditioned by a pathogenic environmental risk factor status condition, the at-risk allele characterized by a low activity level of the enzyme in the brain of the subject selected from the group consisting of a conduct disorder, violent behavior and antisocial behavior, the method comprising the steps of:~~  
determining whether the subject carries ~~one or more copies of an at-risk allele a two- or three-repeat allele of a variable number tandem repeat polymorphism within a gene encoding human monoamine oxidase A enzyme, wherein a locus of the gene is amplified by SEQ ID NO:1 and SEQ ID NO:2;~~  
determining whether the subject has experienced, or is at risk of experiencing, the ~~environmental risk factor childhood maltreatment;~~ and  
concluding that the subject is predisposed to the phenotype if the subject carries the ~~at-risk two- or three-repeat allele and has experienced, or is at risk of experiencing, the environmental risk factor childhood maltreatment.~~
2. (Currently amended) The method of Claim 1 wherein the subject carries the ~~at-risk allele two or three repeat allele.~~
3. (Currently amended) The method of Claim 1 wherein the subject has experienced, or is at risk of experiencing, the ~~environmental risk factor childhood maltreatment.~~
- 4.-5. (Canceled)

6. (Currently amended) The method of Claim 1 wherein the ~~pathogenic environmental-risk-factor childhood maltreatment~~ is selected from the group consisting of exposure to psychological trauma, exposure to psychosocial stress, and exposure to an unhealthy diet, ~~an infectious agent, exposure to a toxic agent, experience with a pharmacological agent, a medical trauma, and an injury.~~

7.-8. (Canceled)

9. (Original) The method of Claim 1 further comprising the step of counseling the subject to pursue or avoid a particular type of employment.

10. (Currently amended) The method of Claim 1 further comprising the step of counseling the subject to avoid the ~~environmental-risk-factor childhood maltreatment~~.

11. (Original) The method of Claim 1 further comprising the step of prescribing a therapy selected from the group consisting of psychological therapy and pharmaceutical therapy.

12.-26. (Canceled)